

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of isolating fully thioated single stranded antisense oligonucleotides from a biological solution, which method comprises the steps of contacting the biological solution with an immobilised metal ion adsorption chromatography (IMAC) resin to adsorb antisense oligonucleotides to said resin and subsequently contacting the resin with an eluent under conditions that provide desorption of the antisense oligonucleotides from said resin, wherein the fully thioated antisense oligonucleotides are separated from incorrectly thioated antisense oligonucleotides in said solution; further wherein the metal ion is Zr²⁺ or Fe³⁺.

Claim 2 (currently amended): The method of claim 1, wherein the biological solution ~~results from~~ is a synthesis reaction of antisense oligonucleotides.

Claim 3 (currently amended): The method of claim 1, further wherein fully thioated antisense oligonucleotides are separated from incorrectly synthesised oligonucleotides.

Claim 4 (previously presented): The method of claim1, wherein fully thioated antisense oligonucleotides are separated from incorrectly thioated antisense oligonucleotides containing 1-5 bonds without thioation.

Claim 5 (cancelled)

Claim 6 (previously presented): The method of claim 1, wherein the antisense oligonucleotides are of a size in the range of 5-30 base pairs.

Claim 7 (previously presented): The method of claim 1, wherein the pH of the biological solution is below about 7 during the adsorption of antisense oligonucleotides.

Claim 8 (previously presented): The method of claim1, which in addition comprises a subsequent step of polishing the isolated antisense oligonucleotides.

Claim 9 (cancelled)